Upgrade Instructions for the BayStack 100-series Version D Boot Firmware

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Introduction

This document outlines the procedure for upgrading the boot firmware for the Bay Networks™ BayStack™ 100-series network management module (NMM).

If you are using the version 1.5 agent for the BayStack 100-series NMM, revision D boot firmware is necessary to enable the following feature upgrades:

- Configuration menu passwords

  This feature allows you to designate read-only and read-write passwords for access to the NMM configuration menus through the communications port. This feature prevents intentional and unintentional configuration changes by unauthorized users.

- SmartSwap™

  This feature enables an NMM to reconfigure a new hub to assume the configuration of the hub it replaces in a managed stack of 100-series hubs.

For information about these and other features of BayStack 100-series hubs and NMMs, refer to the following Bay Networks publications:

- *Using the BayStack 100-series Hubs* (Bay Networks part number 893-839-C)
- *Release Notes for the BayStack 100-series Hubs* (Bay Networks part number 896-086-A)
- *Using the BayStack 100-series Network Management Modules* (Bay Networks part number 893-841-B).
- *Release Notes for the BayStack 100-series Agent Version 1.5* (Bay Networks part number AG-141-A).
- *Firmware Upgrade Instructions for the BayStack 100-series Hubs* (Bay Networks part number 893-00945-A).

Package Contents

The BayStack 100-series NMM Version D Boot Firmware upgrade kit contains the following components:

- A boot PROM for the type of NMM you have:
  - Bay Networks part number CG1011003 for Basic NMMs
  - Bay Networks part number CG1011005 for Advanced and SA NMMs
- One copy of this guide, *Upgrade Instructions for the BayStack 100-series Version D Boot Firmware* (Bay Networks part number 893-00978-A)

Required Tools

To perform the boot PROM upgrade, you need the following tools:

- A #1 Phillips screwdriver for removing the NMM
- A #2 Phillips screwdriver for removing rack-mounting screws
- An industry-standard IC extraction tool or equivalent

Removing the NMM from the Hub

Note: Only qualified technicians should install and service this equipment.

If you need to remove the NMM from the hub before you replace the boot PROM, follow these steps:

1. **Warn network users to take precautions, such as saving their work or logging out of active session applications, before network maintenance is performed.**
2. **Turn off the power to the hub by disconnecting the power cord, first from the wall outlet and then from the hub.**
3. **If necessary, disconnect network cables from the hub. Be sure all cables are accurately labeled for later reconnection.**
4. **If the hub is installed in a rack, remove it.**

5. **Using a #1 Phillips screwdriver, remove the screws from the NMM faceplate in the hub expansion slot.**

6. **Rotate the extractor lever to its unlocked position (see Figure 1).**

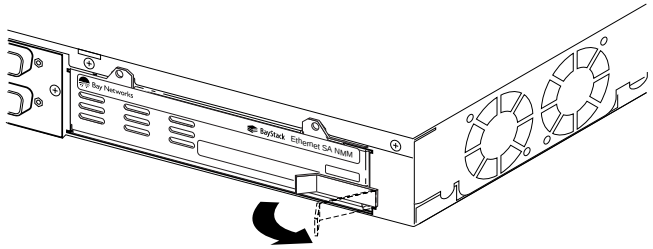

Figure 1. Disengaging the NMM from the hub

7. **Slide the NMM out of the expansion slot.**

Accessing the NMM Baseboard

If you have an SA or upgraded Advanced NMM, you must remove the data collection module (DCM) before you can replace the boot PROM. To remove the DCM, follow these steps:

1. **Using a #1 Phillips screwdriver, remove the screws attaching the DCM to the NMM (see Figure 2).**

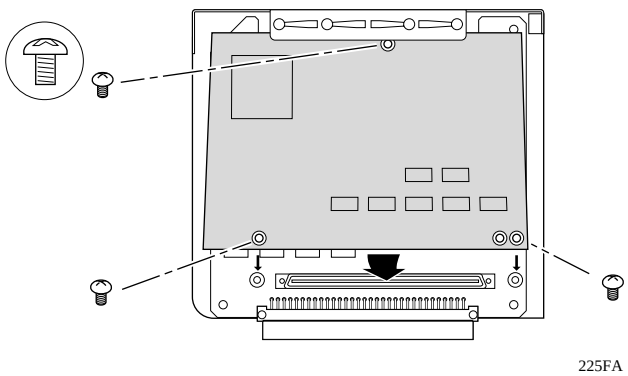

Figure 2. DCM attachment screws on a BayStack 100-series NMM

2. **Gently disengage the DCM connector from the NMM connector and lift the DCM off of the NMM.**

   Set the DCM aside. Be sure to keep the screws with the DCM so that you can use them again later.

Removing and Replacing the PROM

Caution: The NMM baseboard contains devices that are sensitive to electrostatic discharge (ESD). Be sure to discharge any accumulated static electricity and to follow ESD handling procedures (such as wearing a wrist strap) when you handle boards and EPROMs.

To replace the PROM on the NMM baseboard, follow these steps:

1. **Find the PROM in location U2 on the NMM baseboard (see Figure 3).**

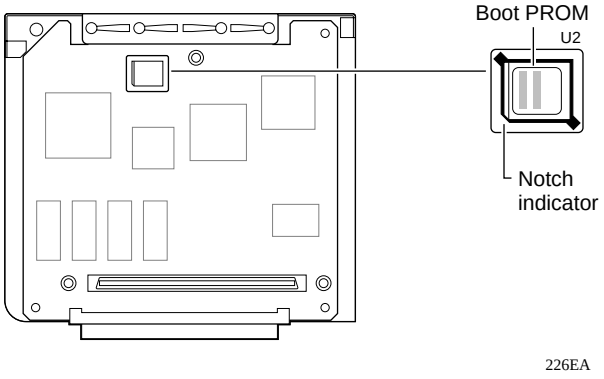

Figure 3. PROM location on the NMM baseboard

Caution: The PROM socket may not always be in the same orientation to the board as is shown in Figure 3. Use the notch indicator to determine the correct orientation of your PROM to the baseboard.

2. **Remove the PROM.**

   a. **Use an industry-standard IC extraction tool to firmly clamp the sides of the PROM.**

Caution: Be careful that the extraction tool you use does not bend or put pressure on the chips adjacent to the PROM socket.

   b. **With the extraction tool in place, pull straight up on the PROM until it disengages from its socket.**

Note: Do not force the PROM out of its socket. If the PROM is difficult to remove, gently wiggle the PROM back and forth a few times to loosen the teeth, being careful not to damage the PROM socket. When the PROM is loosened, pull straight up on the PROM using the IC extraction tool. The PROM should lift out of its socket without damage to the socket or the PROM.

3. **Install the new PROM.**

   a. **Grasp the sides of the PROM between your thumb and forefinger.**

   b. **Gently place the PROM into the socket at location U2 on the baseboard, being sure to align the beveled corner of the PROM with the beveled corner (the notch indicator) on the PROM socket (see Figure 3).**

   c. **Push the PROM straight down until it seats into the socket.**

Note: Do not force the PROM into its socket. If the PROM is difficult to install, verify that the teeth of the PROM are straight before inserting the PROM into the socket. Be careful not to damage the PROM or the socket while pushing the PROM into place.

4. **Reinstall the DCM onto the mounting posts by gently pushing the DCM connector into the NMM connector (see Figure 2) so that the DCM lays flat across the surface of the NMM.**

5. **Reinstall the screws into the mounting post holes of the DCM.**

Replacing an NMM in a BayStack Hub

To replace an NMM in a BayStack 100-series NMM, follow these steps:

1. **Align the left edge of the NMM metal frame with the card guides on the left side of the expansion slot (see Figure 4).**

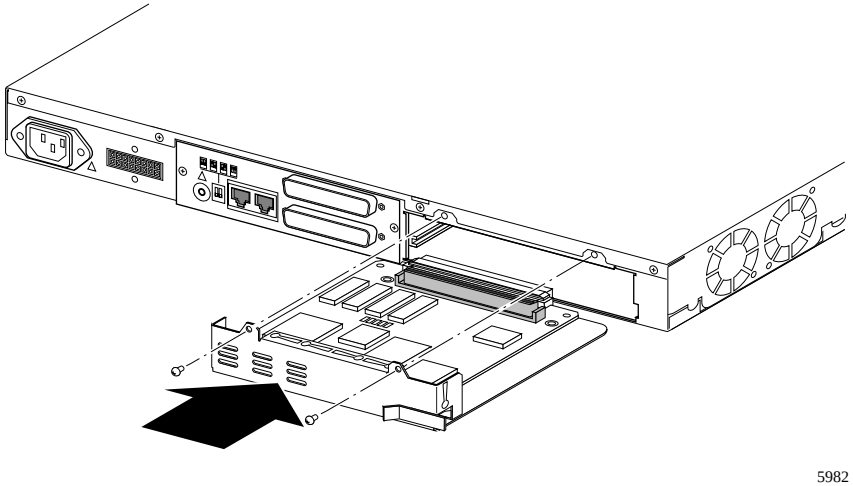

Figure 4. Installing the NMM into the expansion slot

2. **Slide the NMM into the hub until you feel it engage the connector inside the hub. Push the center of the NMM front panel with one or both thumbs until the NMM is firmly seated.**

   The NMM is properly seated when the NMM faceplate is flush with the rear panel of the hub.

3. **Using a #1 Phillips screwdriver, insert the screws that you removed from the NMM through the NMM faceplate.**

4. **Connect or reconnect the power cord—first to the hub and then to the wall outlet.**

Caution: For BayStack products that do not have power switches, the power cord is used as the disconnecting device. The power cord must be installed in a location that will always be accessible to the user.